

## AMENDMENTS TO THE SPECIFICATION

Replace the first paragraph of page 7, beginning at line 1, with the following paragraph:

The configuration shown in Figure [[4]] 5 is also an improper way of wiring the GFCIMP 10 into the electrical system. However, when the device is installed and reset and the power is subsequently applied, the AC electrical breaker or fuse will trip or blow. This is because AC power has been wired to short out as soon as power is applied. This also occurs if the AC power and LOAD connections have been reversed.

Replace the second paragraph of page 7, beginning at line 6, with the following paragraph:

As shown in Figure 6, the power supply circuitry 92 utilizes four connections to generate DC power from the AC source. Due to the various ways a user can wire the GFCIMP 10 device into the electrical system, connection to hot and neutral are provided on both the AC and LOAD sides of the switches 88, 90. Consequently, whether the switches 88, 90 are open or closed the power supply 92 generates DC voltage for the alarm generation circuitry 96. The power supply 92 is a floating supply meaning that the grounded DC system created is not referenced to the AC source system it is generated from. AC power AC power is fed through current limiting resistors 40, 42, 44, 46 to blocking capacitors 48, 54, [[65]] 56, 58 respectively. Typical values for the resistors are 47K ohms and for the capacitors 0.1uF rated at 250 V. If AC power is applied to the AC terminals of the GFCIMP 10 then diode 64 rectifies the positive cycle of the AC wave form. If the device is wired incorrectly with AC power at the LOAD terminals, diode 66 rectifies the positive AC wave form. If the switch 88 is closed than both diodes 64 and 66 rectify the AC wave. In either case resistor 32, nominally 10K ohm, provides current limiting for the DC load. Zener diode 24, typically 12 volts, clamps the rectified AC wave form at the zener voltage. Current flow though blocking diode 22 and causing capacitor 86, typically 100uF rated at 16 V, to charge up to the zener voltage minus a diode drop. The blocking diode 22 prevents the capacitor 86 from discharging during the time the AC cycle is lower than the zener 24 voltage.